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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/496,016	02/01/2000	Mrudula Kanuri	95-308	5591

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WASHINGTON, DC 20036-3307

EXAMINER

HA, YVONNE QUY M

ART UNIT PAPER NUMBER

2697

DATE MAILED: 08/14/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Sp4

Office Action Summary

Application No.

09/496,016

Applicant(s)

KANURI, MRUDULA

Examiner

Yvonne Q. Ha

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 June 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 April 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. Amended claim 4 and specification have been entered. Claims 1-11 are pending.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1,2,3,4,7,8,9, and 11 are rejected under 35 U.S.C. 102(e) as being anticipated by Viswanadham et al. (Pub No. US 2001/0043614).

Referring to Claims 1 and 9, Viswanadham discloses a system configuration with a plurality of ports that couples to LAN hubs and router (Fig. 1), and various switches (Fig 2B). The system may comprise of switching module (i.e. RISC processor and software) (Paragraph 0023, pg. 1) configured for learning network addresses (Paragraph 0027, pg. 2; Paragraph 0038, pg 3). The system is can also have the learning disabled for an identified network switch port (Paragraph 0105, pg. 8; Paragraph 0106, pg. 8).

Referring to Claim 2, Viswanadham discloses the learning of L2 and L3 address information by network switch ports and connected subnetworks (Paragraph 0025, pg. 1; Paragraph 0026, pg. 2; Paragraph 0027, pg. 2).

Referring to Claim 3, Viswanadham discloses the storage of table entry in an address

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table which includes source MAC and IP addresses from the first data packet and an identifier of the second network switch port (Paragraph 0105, pg. 8).

Referring to Claims 4 and 11, Viswanadham discloses the use of a disable flag that when set for a port, it inhibits the learning on that port (Paragraph 0105, pg. 8; Paragraph 0106, pg. 8).

Referring to Claims 7 and 8, Viswanadham discloses the disabling process where a system configured with a plurality of ports that couples to LAN hubs and router (Fig. 1), and various switches (Fig 2B) receiving a data packet with source and destination addresses are learned if learning bit is not disabled or are not learned if the learning bit is disabled (Paragraph 0105, pg. 8; Paragraph 0106, pg. 8; Paragraph 0107, pg. 8; Paragraph 0108, pg. 8).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 5, 6 and 10 are rejected under 35 U.S.C 103(a) as being unpatentable over Viswanadham et al. (Pub No. US 2001/0043614) in view of Kadambi (US 6,430,188).

Referring to Claims 5 and 10, Viswanadham discloses the storage of table entry of a group of addresses (i.e. vector of ports) in an lookup address table as part of the learning process but failed to disclose the inclusion of virtual local area network (VLAN) identifier. Kadambi discloses the inclusion of the VLAN identifier in a table as part of the learning process (Col. 35, lines 63-66; Fig. 22; Fig. 23). At the time of the invention, it would have been obvious to a

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person of ordinary skill in the art to combine the teaching of Viswanadham switching system with learning processes with the teaching of Kadambi inclusion of VLAN identifier in a table for lookup. One of ordinary skill in the art would have been motivated to combine the teaching of Viswanadham switching system with learning processes with the teachings of Kadambi inclusion of VLAN identifier in a table for lookup because the VLAN identifier can be used to enhance the functionality to handle an L2 request when combined with MAC address.

Referring to Claim 6, Viswanadham discloses the switch system that learns L2 and L3 for switching but failed to disclose that a data packet with an L3 address that is not stored in the lookup table storage is forwarded to the network switch port for transfer to the router. Kadambi discloses the process of forwarding data packet with an L3 address in the absence of entry in lookup table (Fig. 26 and Fig. 27, Col. 37, lines 42-67; Col. 38, lines 1-15). At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the teaching of Viswanadham switch system that learns L2 and L3 for switching with the teachings of Kadambi process of forwarding data packet with an L3 address in the absence of entry in lookup table. One of ordinary skill in the art would have been motivated to combine the teaching of Viswanadham switch system that learns L2 and L3 for switching with the teachings of Kadambi process of forwarding data packet with an L3 address in the absence of entry in lookup table because the system learning configuration can be enhanced with filtering capability at a per port basis. Any port not identified for filtering will be routed normally.

Response to Arguments

5. Applicant's arguments with respect to claims 1-11 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.


- Viswanadham et al. (US Patent 6,424,659) discloses multilayer switching apparatus
- Rodrig et al. (US Patent 6,256,314) discloses routerless layer 3 forwarding in a network
- Vig (US Patent 6,262,988) discloses subnetting a switched IP network

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yvonne Q. Ha whose telephone number is 703-305-8392. The examiner can normally be reached on Monday-Friday 7a.m.-4p.m. Eastern.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on 703-305-4798. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9314 for regular communications and 703-872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

YQH
August 5, 2003


RICKY NGO
PRIMARY EXAMINER

~~PRIMARY EXAMINER~~
~~RICKY NGO~~